CLAIMS

1. A method for the production of an enzyme of interest, on an industrial scale, comprising

a) fermentation of a microbial strain producing an enzyme of interest in a fermentation medium comprising one or more partially prehydrolysed complex N-sources, wherein said partially prehydrolysed N-sources are sterilised separately from any other source containing carbohydrates, the prehydrolysis being achieved by addition of an acid and/or a hydrolytic enzyme; and

b) recovering the enzyme of interest from the fermentation broth.

2. The method according to claim 1, wherein the enzyme of interest is selected from the group consisting of an amylase, a cellulase, a lipase, an oxidoreductase, a carbohydrolase, and a non-destructive protease or peptidase.

3. The method according to claim 1, wherein the enzyme is a self-destructive protease or peptidase.

4. The method according to claim 1, wherein the microbial strain is a bacterium or a fungus.

5. The method according to claim 4, wherein the bacterium is a *Bacillus* strain.

6. The method according to claim 1, wherein the complex N-sources are proteins of plant origin containing less than 10% of carbohydrate.

7. The method according to claim 1, wherein the complex N-sources are selected from the group consisting of potato protein and pea protein.

8. The method according to claim 1, wherein the complex N-sources are proteins of animal origin containing less than 10 % of carbohydrate.

9. The method according to claim 1, wherein the complex N-sources are selected from the group consisting of blood proteins, fish muscle proteins and animal muscle proteins.

10. The method according to claim 2, wherein the prehydrolysis results in a breakage of between 10 and 70% of the peptide bonds.

11. The method according to claim 3, wherein the prehydrolysis results in a breakage of between 1 and 20% of the peptide bonds.

12. The method according to claim 1, wherein the amount of prehydrolysed complex N-sources is added in an amount of at least 5 % (w/w) of the total amount of N-Kjeldahl added to the fermentation medium.

13. The method according to claim 1, wherein the fermentation medium is of at least 50 litres.

14. The method according to claim 1, wherein the fermentation occurs via a repeated batch, a fed batch, a repeated fed batch or a continuous process.